



Commission on the Future of the United States Aerospace Industry

*Final Briefing to
TIGR*

Workforce

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12 June 03*



Aerospace Commission Objectives

- Section 1092/FY2001 Floyd D. Spence National Defense Authorization Act
- Sponsors.. Lieberman (CT), Weldon (FL), Bailey-Hutchison (TX), Santorum (PA)
- Study the issues associated with the future of the United States aerospace industry in the global economy, particularly in relationship to United States national security



Commissioners

Great diversity of backgrounds and views

Chairman: The Honorable Robert S. Walker, Chairman, Wexler & Walker Public Policy Association

Vice-Chairman: The Honorable F. Whitten Peters, Partner, Williams and Connolly

Dr. Buzz Aldrin, President, Starcraft Enterprises

Mr. Ed Bolen, President & CEO, General Aviation Manufacturers Association

Mr. Tom Buffenbarger, President, Int'l Association of Machinists & Aerospace Workers

The Honorable John Douglass, President & CEO Aerospace Industries Association

The Honorable Tillie Fowler, Partner, Holland and Knight

The Honorable John Hamre, President & CEO, Center for Strategic & International Studies

**The Honorable William Schneider, President,
International Planning Services, Inc.**

**Mr. Robert Stevens, President & COO,
Lockheed Martin Corporation**

**Dr. Neil deGrasse Tyson, Director,
Hayden Planetarium**

**Ms. Heidi Wood, Executive Director,
Morgan Stanley**





Facts in Focus

- The U.S. is the best Aerospace Country in the World
- We (the U.S.) have a plan
- Everyone wants to be like us
- The U.S. is a good partner
- Lack of Aerospace Workers
- “I have more 3 times more people over the age of 60 than under the age of 30”
- Students are “dumber” now than in any other time known to humans
- We have the lowest math and science scores of industrialized nations
- Students are not studying math, science or engineering in school
- Foreign students...bad
- No one is flying on airplanes anymore
- Defense companies are a bad place to invest money
- Falling launch rates
- The reason that we are not going to space is because launch costs are too high
- Aerospace industry is hurting the country by sending some jobs overseas (Offsets)
- Just give us (industry and government agencies) more money and trust us to execute
- Don't have enough money for research
- Congressional people proud of the fact that they don't have a passport and have never been overseas
- Just give us more money...Just give us more money...Just give us more money!!!

So...what IS the problem??????



Facts in Focus

“Urban Legends”

- The U.S. is the best Aerospace Country in the World... So why are Airbus aircraft **technologically superior to many of those from Boeing?**
- We (the U.S.) have a vision and a plan.. “US Policy.. Lost in Space”
- Everyone wants to be like us... No, themselves with aerospace technology
- The U.S. is a good partner... **except when we...**
- Lack of Aerospace Workers... **but layoffs continue and students can't get jobs**
- “I have more 3 times more people over the age of 60 than under the age of 30”... **but how many do we really need?**
- Lowest math and science scores of industrialized nations... **but the tests show...**
- Students are not studying math, science or engineering in school... **why should they?**
- No one is flying on airplanes anymore... **so you like center seats?**
- Defense companies are a bad place to invest money.. With a return less than T-bills
- Gallileo (European PNT) is bad... **have anything to do with US history as a partner?**
- Aerospace industry is hurting the country by sending some jobs overseas (Offsets).. **Is the Global Economy a bad thing?**
- Don't have enough money for research... **How about NIH?**
- More money will solve all our problems!!!... **perhaps not!**

So...what IS the problem??????



Commission Final Report Framework

- 4 Public meetings hearing testimony from over 100 persons
- Travel to China/Japan as well as to Europe (London, Brussels, Paris and Moscow)
- Visits to Kennedy Space Center, Boeing Commercial, Spectrum Astro, Institute for Creative Technology and Lockheed
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- Received briefings from over 80 stakeholders with perspective on the aerospace industry

Chapter 1	Vision: Anyone, Anything, Anywhere, Anytime
Chapter 2	Air Transportation: Exploit Aviation's Mobility Advantage
Chapter 3	Space: Its Special Significance
Chapter 4	National Security: Defend America and Project Power
Chapter 5	Government: Prioritize and Promote Aerospace
Chapter 6	Global Markets: Open and Fair
Chapter 7	Business: A New Model for the Aerospace Sector
Chapter 8	Workforce: Launch the Future
Chapter 9	Research: Enable Breakthrough Aerospace Capabilities



Bottom Line I - Vision

FACT - The U.S. needs a vision that inspires and a national will to attain it to sustain its leadership

Now is the time for government, industry, labor and academia to embrace a vision for aerospace for the 21st Century.



Bottom Line II

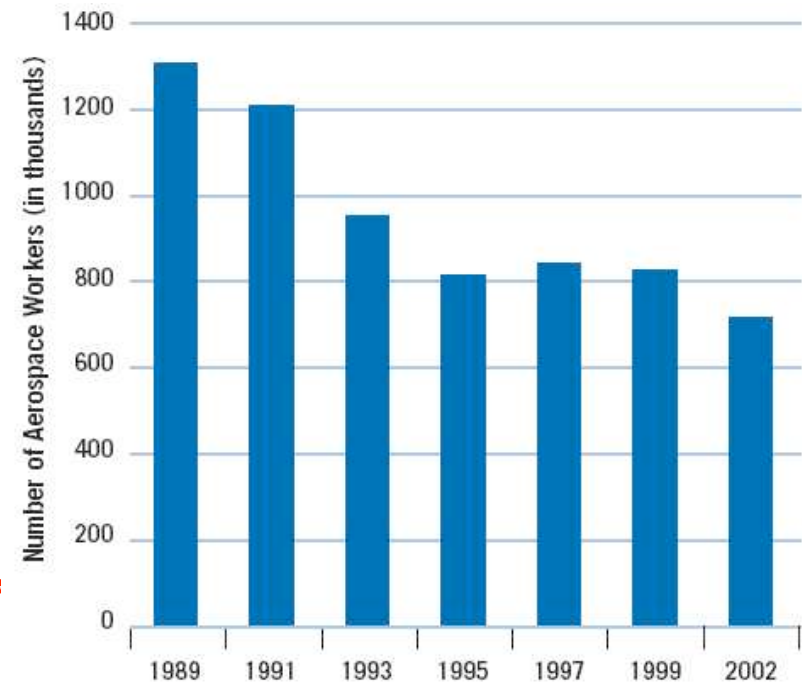
- ***Air Transportation*** - Transforming the nation's air transportation system must be a national priority
- ***Space*** - Space is a strategic and economic frontier that should be aggressively pursued
- ***National Security*** - Today's military capabilities are at risk due to a weakened industrial base, workforce concerns, and need to protect critical infrastructure
- ***Government*** - Government organizations and processes must be reoriented so healthy aerospace industry can meet challenges of our security and economic needs and also compete successfully in international marketplace
- ***Global*** - The U.S. government must take immediate action to neutralize distortions and enable fair and open competition
- ***Business*** - To be globally preeminent, our aerospace industry must be able to attract vitally needed capital at reasonable cost
- ***Research*** - Industry and government need to create an environment that will accelerate the transition of research into application



Workforce

Facts in Focus

- Aerospace provides hundreds of thousands of high quality jobs across the nation
- Over 600,000 scientific and technical aerospace jobs lost in past 13 years
- Aging endemic... 26% aerospace workers retirement eligible by 2008
- In a survey of 500 U.S. aerospace engineers, managers and production workers, 80 percent said they would not recommend aerospace careers to their children



Total Employment in the Aerospace Sector
(1989 – 2002)

Bottom line... Our policy makers need to acknowledge that nation's apathy toward developing a scientifically and technologically trained aerospace workforce is equivalent of intellectual/industrial disarmament



Workforce

Launch the Future

Today's Aerospace Workforce – in decline

- Create an interagency task force to develop a national strategy on aerospace workforce to attract public attention to importance and opportunities in aerospace industry

Math, Science and Technology Education – failing

- Make long term investments in math and science education



“If the Aerospace Industry cannot attract and retain the best and brightest, then the industry doesn't have a future..”

Commissioner Tillie Fowler



The Way Ahead...

- Nov 18:
 - Official release of final report
 - Briefing to Senate/House staff
 - Distribution to key stakeholders
 - Press conference to announce Final Report.. Over 100 persons in attendance from across the country
- Nov 19: Final report presented to Vice President Cheney... endorsed and sent to all Cabinet Members
- Nov 20: Over 600 requests received for final report
- CY 2003:
 - Presentations by Commissioners/Staff at various events
 - Congressional Hearing
 - Commission findings (Mar)
 - Air Traffic Management
 - Congress proposes more FY04 money for FAA/NASA research in nuclear propulsion and aeronautics
 - New export control reform in place in State Dept
 - Joint gov't and industry team working implementation



How will we know that we were successful...

- Within the next 18-24 months...
 - A formal progress review sponsored by DoD and NASA and executed by the Government Accounting Office
- From an Aviation Week Editorial in the 25 Nov issue...

“While there is much of the general and expansive rhetoric found in earlier commissions whose reports have never seen the light of day, there is much to commend in this panel’s recommendations for attention – and action – by the Administration and Congress. There are few other industries in which a wise investment now in technology, people and efficient government could yield such great returns for mankind.”



Contacting the Commission

Commission on the Future of the United States Aerospace Industry

website:

www.ita.doc.gov/aerospace/aerospacecommission